



WorleyParsons

resources & energy

Infrastructure & Environment

Level 12, 141 Walker Street,
North Sydney NSW 2060
Australia
Telephone: +61 2 8923-6866
Facsimile: +61 2 8923-6877
www.worleyparsons.com
ABN 61 001 279 812

Ku-ring-gai Municipal Council SEPP 65 Assessment Rev A 19-01-2012

**DA: 5A-13 Memorial Ave and 212-216 Mona Vale Rd St Ives
Issue A DA drawings**

Urban Design Comments

This report evaluates the design proposal for 5A-13 Memorial Ave and 212-216 Mona Vale Rd St Ives in terms of the ten SEPP 65 Principles.



The Content

Description of the Proposal

SEPP 65 Criteria

Principle No 1: Context

- Density, height and form
- the precinct
- street and block pattern
- the spatial system
- the subdivision pattern
- relationship with the street
- the natural features

Principle No 2: Scale

- the form and spatial system
- the resolution of the form : proportions / modulation and articulation

Principle No 3: Built Form

Principle No 4: Density

Principle No 5: Resource, Energy and Water Efficiency

Principle No 6: Landscape

- retain and reveal the natural features
- the relationship between the ground floor and the ground plane
- the relationship of the interior and exterior spaces
- plant species

Principle No 7: Amenity

- entrances
- circulation
- communal open space
- the apartment design
- private open space

Principle No 8: Safety and Security

Principle No 9: Social Dimensions

Principle No 10: Aesthetics

- the relationship of the building form to the site
- the relationship of the building form to other buildings
- the resolution of the building form

Conclusion

Recommendations



Description of the Proposal

The proposal is for three residential flat buildings to be located on an amalgamated site at 5A-13 Memorial Ave and 212-216 Mona Vale Rd, St Ives. The buildings contain 124 apartments with 163 car spaces including 31 visitor spaces; 40 bicycle spaces and storage.

The Applicant is: Village Building Company Ltd

The Architects are: dem 15 Help Street Chatswood

Drawings:

DA Issue

AR – CV01; AR – 0101-0102 AR-1200-1204;AR-1401-1405;AR-1701; AR- 2101, AR- 2301, AR-2500-2502, ar-2701

Compliance

The proposal is to comply with the following Council Codes and Planning Instruments:

- Ku-ring-gai Planning Scheme Ordinance [KPSO]
- Ku-ring-gai Local Environmental Plan No 194 [LEP 194]
- Ku-ring-gai Multi Unit Housing Development Control Plan No 55 – Railway /Pacific Highway Corridor and St Ives Centre
- State Environmental Planning Policy No. 65 Design Quality of Residential Development
- State Environmental Planning Policy (Building Sustainability Index: BASIX) 2004

The Site

The site is an amalgamation of regular shaped lots with a frontage to Mona Vale Road and three battle axe blocks irregularly shaped lots. There are two access ways from Memorial Ave. Mona Vale Road runs North East and Memorial Ave runs almost due North / South. These streets meet further to the South in an acute angle. The proposal envisages three five storey buildings, Buildings A, B and C above two levels of car parking.

The consolidated site is 7462 m². There is a slight fall across the site to the north east. There are some substantial trees but there is no riparian zone or evidence of rocky outcrops. The area is undergoing a transition from low density single detached residences to apartment buildings as the result of the zoning changes under LEP 194. The zoning is 2[d3]. There are no cross block street connections proposed between the two existing streets.

The St Ives Town Centre is located to the south and there are shops directly across Mona Vale Road. A Council car park is located on the Southern boundary of the site and apartment buildings to the north. St Ives Village Green is located across Memorial Ave and contains a large park and sports fields. Bus services are available from St Ives Town Centre and along Mona Vale Road.



Figure 1 – Locality map

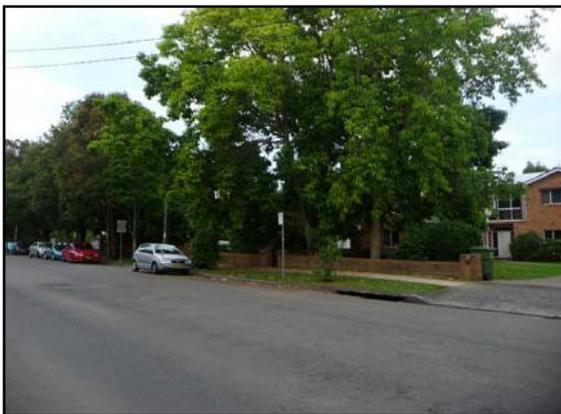


Photo 1 – Memorial Avenue



Photo 2 – The Village Green



Photo 3 – Northern access to Memorial Ave



Photo 4 – Northern access to Memorial Ave



Photo 5 – Access to Memorial Ave



Photo 6 – Access to Memorial Ave



Photo 7 – Mona Vale Road looking north



Photo 8 – Mona Vale Road looking south



Photo 9 – Mona Vale Road Council Car Park



Photo 10 – Boundary of site with Council Car Park



Photo 11 – The site's north-western corner



Photo 12 – The site



Photo 13 – The site



Photo 14 – Adjacent development Mona Vale Rd

The Proposal

Building A has 46 apartments and is 5 storeys above 2 storeys of basement car park. It faces Mona Vale Road; Building B has 46 apartments is 5 storeys above 2 storeys of basement car park [There is a typo in the SEE which says 45]. Building C has 33 apartments and is 5 storeys above 2 storeys of basement car park. Buildings B and C do not have street frontages and are located behind Building A.



The FSR is 1.27:1. The allowable is 1.3:1.

Building A is set back 13.6 metres from Mona Vale Road and 6 metres from the side rear boundaries within the site. Buildings B and C are all located within the 6.0 metre side set back from the boundaries of the site.

SEPP 65 Criteria Assessment

PRINCIPLE NO. 1: CONTEXT

Good design responds and contributes to its context. Context can be defined as the key natural and built features of the area.

The Requirement

To ensure that a development responds to its context it needs to:

- Be an appropriate density, height and form
- Be considered as part of the overall precinct / street not as an individual stand-alone building
- Ensure that the street and block pattern relates to the density, height and form
- Set up a positive spatial system with appropriate spacing between buildings within the site and with the neighbouring development
- Reflect the existing and / or proposed subdivision pattern
- Relate to the street
- Reveal the natural features. In this case, the fall in the land and vegetation

The Response

Density, Height and Form

Be an appropriate density, height and form

Density

- The FSR of the development is 1.27:1 FSR. This is slightly less than the FSR allowed.
- The density is appropriate for the context although the constraints of the site have produced an unacceptable form. It is quite possible that the maximum density may not be achievable on this site due to the lack of street frontages and the irregular shape of the site.

Height

The height complies with the controls for 2[d3] limit control of 4 storeys with an additional partial storey set back. The height of the proposed buildings:

- Is similar to many of the apartment blocks in the area height and is similar to the apartment block to the north.
- Relates to the size of the footprints of the buildings
- Relates to the other controls of density, set-backs and site coverage however the height limit in relation to these other controls has resulted in a poor urban form. If the development was following under urban design principles an increase of one or two storeys to Mona Vale Road with the same density and the other site coverage controls may have freed up the rest of the site to enable the introduction of a through street and a better relationship between buildings and properly defined open space.



- Does not have any adverse impacts on other development within or around the site
- Has the potential to create spaces between the buildings which are well proportioned
- Provides a clear roof line to the sky which has the capacity to block off views of any existing taller buildings

The height of the development is acceptable.

Form

The overall allowed FSR is organised into three building forms which have:

- Building A facing and parallel to Mona Vale Road
- Building B behind and parallel to Building A
- Building C parallel to Memorial Ave and behind Building B

The building footprints are generally rectilinear in plan. They are however very irregular and have a large number of stepping, indentations, cut out corners etc. Because the plans are so irregular the additional top storey on each building with its set-backs is also very irregular. The result of this is that both the sections and plans of all 3 buildings are very convoluted; do not relate to each other and do not have the potential to relate to adjacent development. The buildings appear to be designed to respond simplistically to solar access and the large number of changes of direction in plan extrapolated over the height of the buildings will ensure that they appear visually more dominant than if they were resolved in a way which focused on the spatial system.

The form of the development is not satisfactory as the three building do not relate to each other and do not provide the potential for adjacent buildings to relate to them. They will be visually dominant.

The Precinct

- *Be considered as part of the overall precinct / street not as an individual stand-alone building*

The site complies with the objectives of the Ku-ring-gai Planning Scheme Ordinance (PSO) and the Ku-ring-gai LEP 194. It is close to the St Ives Town Centre and bus services. The area was rezoned under the Ku-ring-gai Local Environmental Plan 194 and there are blocks of apartments of similar size to the proposal already constructed or under construction.

The proposal reflects the controls in the PSO and DCP in terms of the zoning objectives for the site. The DCP envisages 4-5 storey apartment buildings with underground car parking located in a landscape garden setting. 5 storey residential flat buildings are located to the north on the adjacent site.

It should be noted that even though the buildings are in a landscape setting because of their size and proximity to each other and the neighbouring buildings they still need to relate to one another and create a positive spatial system between them.

The proposal relates to the precinct in terms of density and height but the form is not satisfactory for the following reasons:

- The proposed development is conceived as three separate buildings. They are not designed as an integrated whole. This is evident in the irregular footprints and the lack of a positive relationship of one building to another.
- The buildings are not designed to complement each other and the setting but rather are a cookie cutter replication to suit the set-backs with one building behind another.



- The buildings are not designed to create a positive arrangement of space between them and with the neighbouring buildings. They are designed as “object” buildings. This is partly due to the simplistic response to the set-back controls and the subdivision pattern.

Street and Block Pattern

- *Ensure that the street and block pattern relates to the density, height and form*

The Requirement

When an area is undergoing change the street and block pattern must relate to the density, height and form. This may mean that the street and block pattern needs to be altered to suit the new typology or the typology altered to suit the existing pattern.

The Response

In this case the development is located in a street and block pattern which is large and reflects the low density development and very large lots which previously predominated in the area.

Building A addresses Mona Vale Road. Buildings B and C have no street frontage. The lack of street frontage to Buildings B and C is not a good model in low density development with one and two storey single detached houses but it is a particularly bad model in a high density development with five storey apartment buildings. The problem is made worse by the tight irregular shape of the site. The street and block pattern should be reconfigured to suit the new typology.

In other precincts in Ku-ring-gai, the DCP / LEP require a new street. This is to be applauded as the increase in density warrants a smaller street and block pattern and it is often overlooked when changes are made to density and building typologies. A new “through” street between Mona Vale Road and Memorial Av even if relatively narrow would have had the capacity to provide frontages for the apartment blocks, car access points, to regularise the site and set up the potential for clear spatial relationships between buildings.

However most of the street block is already developed and there is now no opportunity for any cross street/s either public or private to create frontages for buildings, and to rationalise the very irregular shape of the amalgamated lot.

The street and block pattern is also not appropriate for residential flat buildings where the higher density requires a finer grain street and block pattern however this needed to occur at the beginning of the development process.

The Spatial System

- *Set up a positive spatial system with appropriate spacing between buildings*

The Requirement

The spatial system in an urban area consists of both public and private spaces. It comprises the street network; front; side and rear set-backs and how those spaces link to internal communal courtyards/ spaces and to neighbouring buildings. In urban areas the spacing between buildings is as important as the resolution of the architecture and the higher the density of an area the greater the importance of the spatial system.

The spatial system must be considered in terms of the ground plane; the dimensions in plan and section; the shape of the space in plan and section and the level of definition of the spaces. The



spaces around the new buildings change as a result of a new building typology, the new set-backs and the amalgamation which has created a new subdivision pattern.

In order to minimise the impact of large buildings even if they are in a landscaped setting, they need to relate to each other by the creation of a series of positive spaces. Plans and sections that are relatively simple; have straight and not curvilinear walls are more likely to achieve a successful outcome.

The Response

Within the site

The organisation of the proposed buildings does not create a defined spatial pattern. The plan shapes of Buildings A and B are so fragmented that the space between them is “left over”. If the plans were more rationally organised this space at approximately 12 metres wide and 14 metres high has the potential to be a legible defined space. This separation of 12 metres with a height of 14 metres results roughly in a portion of just over 45 degrees between the height of the building and the width of the space - an ideal spatial relationship.

The plan shapes and the relationship of Buildings B and C are also so fragmented and the different orientation of the buildings ensures that the space between them is ill defined and “left over”. This will result in the buildings appearing highly dominant.

Development on this site needs to rationalise the two different street angles [and consequentially the spaces] between Memorial Ave and Mona Vale Road. The current proposal does not do this.

With the adjoining sites

The location and resolution of the northern façade of Buildings A and B on the north side provide the potential for “positive” spaces to be created with adjoining development on the north.

The plan shape of Building B on the southern end is very irregular and creates a poor relationship with the site boundary and consequently any future development to the south.

The plan form of the proposed Buildings C does not provide any potential for “positive” spaces to be created with future development on the adjoining site to the north. Buildings B and C are designed to fill the space.

No attempt has been made to address this issue of spatial definition. The lack of a coherent spatial system is clearly evident in the site coverage Plan AR - 1401

The Subdivision Pattern

- *Reflect the existing and / or proposed subdivision pattern*

The Requirement

Reflecting the spacing and building pattern of an earlier subdivision with the introduction of a new typology can be a key way of integrating new development into an area. This can be achieved through the organisation of the form; footprint and spacing of new buildings.



The Response

The site at Mona Vale Road and Memorial Ave is an amalgamation of 5 sites, 2 facing Mona Vale Road and 3 battle-axe lots. There is no street frontage on Memorial Ave. The traditional pattern of development in this precinct was a front garden; relatively small side set-backs and a large rear set back. Over time these rear yards have been subdivided into battle axe allotments with single storey dwellings.

The amalgamated site is very irregular in shape with a long narrow handle of land to the north-west and a triangular space to the south west. These portions of the site are ill suited for apartment buildings which are quite regular in footprint and require a certain site width. The site has a large area with a relatively small street frontage.

In this case because three of the earlier subdivided sites are embedded in the centre of the amalgamated lot have no street frontages and are irregular in shape there is no suitable precedent for reflecting the subdivision in the new development.

The proposed development does reflect the original development pattern in that it locates a building facing Mona Vale Road.

Relationship with the Street

- *Relate to the street*

The Requirement

The relationship with the street is important from two perspectives, firstly in terms of the view from the street to the building but also in the provision of a street and public address for the buildings.

The relationship between the buildings and the ground in all buildings is critical in achieving a satisfactory interface between the public and private areas. This relationship is more critical in urban areas where buildings are hard to the street edge and less critical in a landscaped setting however buildings in the landscape still need to address this relationship and should not appear as if they can be sited anywhere.

To ensure that a building and / or group of buildings has a positive impact at the interface with a street they need to:

- Have a clear level and generous relationship between the ground floor and the ground plane.
- Have entrances and / or openings / balconies facing the street or have clearly visible entries.
- Place vertical blade walls so that don't create the appearance of a "solid wall" when the building is viewed obliquely along the street.
- Organise balconies so that all balconies do not all sit proud of the façade. This creates the appearance of a "solid wall" when the building is viewed from the street. This can be achieved with fully recessed or partially recessed balconies.
- Have all plumbing concealed including drainage from balconies.

The Response

Relationship between the buildings and the ground plane

The site is relatively flat so the proposal does not have to deal with large differences in levels. There is no attempt however to create a base for the buildings and/ or part of the buildings or



use the levels within the buildings to relate to the ground plane of the site. A more innovative approach to the entrances, ground floor courtyards and the landscape space could have integrated the buildings with the site.

Extending some of the ground floor courtyards would improve the relationship of the building with the street even if they cannot be brought to the street with private entrances. Larger courtyards which have a greater relationship with the ground than with the balcony above diversifies the mix as people moving into these apartments may be down-sizing and may be used to very large private gardens. Mix of apartments applies to both the internal and external qualities.

Interface with the Street

Entrances

The entrance to Building A is clearly visible. The entrances to Building B and C are not visible as these two buildings have no street frontage. The entrance pathways are not direct and the legibility poor as a result. The paths are inappropriately narrow for five storey buildings.

The pedestrian entrances need to be reconsidered for reasons outlined in Amenity.

Building Form

Building A has 5 storeys aligning with Mona Vale Road with windows, balconies etc overlooking the street so that it will therefore provide:

- A clear edge to the street frontage.
- A clear roof line against the sky when the buildings are viewed either from / along the street. This will ensure that the overall appearance of mass of the buildings from Mona Vale road is minimised.

Oblique Views

There is no pattern of blade walls which dominate the view from along the street. However the irregular plan shape will ensure that Building A is more dominant on the street than a more regularly planned building parallel to the street. The irregularities combined with the symmetrical plan will further increase the dominance of Building A from the street.

The angle of Building C to buildings A and B exacerbates the potential for dominance of the buildings and the failure of Building B to address the angle of Memorial Ave also increases the negative visual impact.

Balconies

The balconies are semi recessed and there will not be a dominating view of their underside from the street other than because of the shape of the building in plan.

There are no details as to the plumbing resolution. The requirement for concealed services can be conditioned by Council.

The Natural Features

The response to the natural features of any proposal depends on the ability of that building and / or group of buildings to:

- Reveal the site and not to obliterate it.



- Ensure that the natural features of site are enhanced as important elements

The Requirement

To do this, buildings need to:

- Be designed so that they are not “object” buildings but are buildings which define a spatial system. In this way the spaces created around them and with adjacent buildings are “positive” spaces in which the shape of the land is understood and the other natural features are key elements.
- Create internal spaces and façade designs that address the external spaces including the street. This ensures that the street and other spaces read as important places.
- Ensure that the ground level of the building sits appropriately on the ground plane. This can be done in a range of ways including relating internal / external levels with platforms and / or walls and open spaces that relate to the footprint and height of the building.

The Response

The natural features on the site are limited to the slope of the site and the trees.

The proposed buildings are designed as “object buildings” so that the spaces around them are “left over” The proposal maintains two trees at the entrance in the Mona Vale Road frontage. This is an important consideration. There is an attempt to reflect the site slope.

PRINCIPLE NO. 2: SCALE

Good design provides an appropriate scale in terms of bulk and height that suits the scale of the street and the surrounding buildings.

The Requirement

The scale of a building is directly related to the size, siting, form and the aesthetics of a building.

Successful resolution of the scale of a building is complex and needs to be resolved in two ways. Firstly, the resolution of the mass of building into a particular form; and secondly, the resolution of that form into architecture. It is not a two step linear process but an iterative design process.

Firstly, buildings need to be resolved at the larger scale as a balance between building form and the spatial system of the precinct / city. In this context the design deals with the shape of the building; footprint; height of the building relative to its typology and together with the spatial system around it including the street. This is where the overall mass is organised into a particular building form.

Secondly, buildings need to be resolved in how that form is further proportioned. This is the result of the modulation and articulation in the design resolution and deals with the depth in the walls; the plan shape; placement of openings; organisation of balconies; blade walls; use of materials; and roof form.

Buildings of a similar size may appear to be very different in scale due to the way that they are proportioned. Too much modulation and articulation will make a building appear more dominant as will too little articulation.

The actual height and overall size of a building are in large part dictated by the planning controls and the shape of the site. How the resulting form is further proportioned will contribute to the



impact of the buildings in the landscape setting; their relationship to neighbouring buildings and the requirements and quality of the interiors

The apparent scale of the building depends on:

The Form

- The actual size of the building, height and footprint.
- The shape of the building in plan and section
- The relationship of the building to the ground plane
- The shape, proportions and definition of the space which is left over around the building and between that building and other buildings.

The Proportions

- The shape of the building in plan and section
- The way in which the building form is organised into a particular combination of vertical and horizontal elements.
- The way in which the form is further articulated by the openings; balconies; screens; blade walls and other elements.

The Response

The general form of the development proposal reflects the controls which envisage apartment buildings with underground car parking located in a landscape garden setting and has the following positive aspects:

- The five storey height creates a well proportioned interface with Mona Vale Road. Although as outlined above additional height here may have resulted in the street having a greater sense of definition and freed up the interior of the site.
- The actual size of the proposed buildings is in keeping with the new and proposed adjacent properties.
- The parallel alignment of the Building A with the street and the side boundaries enables adjacent buildings on the northern boundary and those across the street to reflect that alignment and create a positive spatial relationship with Buildings A
- The parallel alignment of Building B with the northern boundary enables adjacent buildings on the northern boundary to reflect that alignment and create a positive spatial relationship.
- The simple flat / skillion roofs enables adjacent development to be designed in a way that the buildings along Mona Vale Road can be read as a suite and not as one building standing out from another.

The form of the development does not create positive spatial arrangements with the buildings within the site and around the site and is weak in the following ways:

- The proposed buildings:
 - do not all have street addresses.
 - are too stepped in plan and section and do not set up positive spaces around them and with their existing and / or potential neighbours. This excessive stepping in plan and section impacts negatively on the way in which the buildings are proportioned and maximises the visual dominance of the buildings on the site.
 - fail to deal with the irregular angles of the site boundaries and resulting spaces. The lack of a parallel alignment of Buildings B and C with the side boundaries and



each other prevents buildings on the northern and southern boundaries creating a positive spatial relationship.

Proportions: Modulation and Articulation

The Requirement

The proportions of a building are created by the combination of the form and plan shape; the modulation and articulation and the selection of materials. How the building form [plan, height and depth] is proportioned further determines the impact of the building.

Modulation usually refers to the changes in the depth of the wall.

Articulation usually refers to the way in which elements are detailed.

Appropriate proportioning can mean that the “apparent” bulk of a building is reduced. The external walls need to be articulated and modulated so that the buildings appear well proportioned, too much modulation and the buildings will appear larger in size, too little and the buildings will appear larger.

Elevations on larger buildings need to be divided into horizontal and vertical patterns at the scale of the whole elevation and then further divided within that larger format. Above 3 storeys it is not enough simply to repeat the plan for the height of the building. Horizontal elements should be balanced by vertical elements. As a guide 1/3 / 2/3 proportions can work effectively over the total elevation.

As a simple guide for commercial/hotel/residential buildings of up to 6 – 8 storeys, delineation and articulation of the ground floor including possibly the first floor and top floor is usually essential and in buildings with large footprints additional elements of vertical delineation are necessary.

Because most buildings are viewed obliquely along the street particularly in urban areas, it is essential that there is modulation and articulation in the external walls. Modulation and articulation provide the depth in the elevation as well as contributing to how the building is proportioned. Modulation and articulation provide shadow lines and rhythm when viewed along the street. This provides the street with a sense of scale and rhythm together with points of points of visual interest.

All external walls need “depth”. Where buildings have external walls which are without depth, the same mass of building can appear much greater because there is nothing to create a sense of scale in the façade or nothing to relate the building to the street.

Depth makes an important contribution to the apparent scale of a building as it eliminates the potential “flatness” of the facade without contorted articulation. It provides shadow lines and strengthens the relationship between the building and the outside. Depth in a wall is achieved by the actual thickness of the wall; where the openings are located in that depth i.e. on the outer face or inner face or centre of the wall. The use of panels of different materials, glazing to the underside of the ceiling and location of windows on the internal skin all assist in this modulation.

Various elements are used to establish the proportions of a building. The elements which can assist in proportioning the buildings are:

- Indentations and shape in plan and/or section.
- Organisation of building parts by differentiation; top floor and/or ground floor; double storey height definition; ground and first floor; top floor/s; the arrangement of the vertical circulation.



- Climatic response / louvers / horizontal projections/ green walls/ water catchment.
- Thickness of the external wall.
- Solids and voids.
- Blade walls, party walls and pilasters.
- entrances balconies; verandas and canopies.
- “Hole in wall” windows related to panels of glazing.
- Window sills and reveals and door reveals.
- Materials: texture; scale and application.

The Response

The proposed buildings are not well scaled. This is the primarily the result of the excessive stepping in the plan and section and fails for the following reasons:

- The irregular plan shape is articulated into repetitive vertical elements that are the result of the plan shape. The proportion of these articulated elements is created by extrapolating the plan for the height of the buildings and not an attempt to articulate the buildings into meaningful horizontal and vertical elements.
- The proportioning relies on the plan format and does not use the manipulation of solids and voids to create coherent panels of different materials / glass / render / timber combined with some “hole in the wall” openings.
- The roof is skillion and the buildings have a recessed top level but this is also convoluted in plan and lacks clarity. On the high side of the skillion roof and the sloping side the fenestration is “hole in the wall”. If the fenestration was organised to extend to the underside of the roof the upper level could be read as a horizontal element. The fenestration on the lower side of the skillion roof is better handled by taking the elements to the underside of the roof so that the arrangement also creates a base, and top without the need to employ arbitrary horizontal elements.
- The organisation of the materials; openings and walls seem arbitrary. Painted “frames” are used throughout the buildings without relevance to the proportion of the panels they are “framing” or the proportions of the “framing” element itself.

The selection of materials includes brick and painted render, aluminium louvers and light weight cladding on the upper level and in vertical strips. The balustrades are glazed. This is an appropriate palette for the location and building typology and can be maintained relatively easily.

PRINCIPLE NO. 3: BUILT FORM

Good design achieves an appropriate built form for a site and the building’s purpose, in terms of building alignments, proportions, building type and manipulation of building elements.

The Requirement

As discussed under The Scale an appropriate building form on any site needs to:

- Address the street.
- Create a positive spatial system. This is achieved by following the desired building alignment. The building alignment may vary from the existing in areas undergoing change and should create a “positive” spatial system with the street and between buildings.
- Create clear edges and a clear roof line against the sky.
- Use the resolution of the plan, height and section to articulate the form into a series of well proportioned elements which can be further articulated.



- Use openings; projections; balconies etc to further articulate the elements which create the overall outcome.

The Response

The proposed development is organised into three buildings. The form of this development fails to create a satisfactory site resolution in the following ways:

- Building A aligns with and has a street frontage to Mona Vale Road. Buildings B and C are located behind A without a street frontage.
- The floor space is distributed to suit the height and the site set-backs regardless of the shape of the buildings and their relationship to each other. In this case the building alignments are informed by the set-back controls although they do not stipulate a specific alignment or “build to” line.
- The spaces between and around the buildings are “left over” and the buildings are the dominant elements.
- The building form is not further modulated or articulated to create facades which are well proportioned. This is primarily due to the convoluted plans.

Skillion roofs on the set-back upper levels provide a clear roof line against the sky. This is most effective on Building A where the building aligns with the street.

If it is acceptable to locate three buildings within the site without a public street address then the following needs to occur:

- Rationalisation of the plans into regular shapes.
- Creation of positive spaces between the buildings.
- Creation of the potential for positive spaces with the buildings on the neighbouring sites.

PRINCIPLE NO. 4: DENSITY

Good design has a density appropriate for a site and its context, in terms of floor space yields (or numbers of units or residents).

The Response

The proposal reflects the objectives for KMC in terms of the density for the location of the site. The objectives are to create a specific area of medium to high density development that is close to the St Ives Town Centre. The proposal achieves a little less than the maximum permissible density in three residential flat buildings.

PRINCIPLE NO. 5: RESOURCE, ENERGY AND WATER EFFICIENCY

Good design makes efficient use of natural resources, energy, and water throughout its full life cycle including construction.

The Requirement

Buildings should meet the BASIX targets and extend these where possible. Buildings should minimise the use of natural resources by employing a range of measures. These include:

- Passive solar design / shading etc.
- Maximising natural light.
- Optimising cross ventilation.
- Water reuse.



- Using materials with low embodied energy.

The Response

72.6% of the apartments have 3 hours solar access to living areas on 21st June. 70% have 3 hours solar access to living areas and private open space on 21st June. 10 apartments only have a southerly aspect.

All apartments have natural light to all habitable rooms and the depth of buildings is satisfactory

71% of apartments have cross ventilation.

The roof rainwater is recycled to water the gardens. Drought tolerant species have been selected for the landscaping.

There is no reference to ceiling fans and / or air conditioning. Ideally the development should provide an option to install ceiling fans.

The SEE states that environmentally sensitive materials are proposed. It is not clear what this means.

PRINCIPLE NO. 6: LANDSCAPE

Good design recognises that together landscape and buildings operate as an integrated and sustainable system, resulting in greater aesthetic quality and amenity for both the residents and for the public domain.

The Requirement

To ensure that a development responds to its landscape context it needs to:

- Retain, reveal and enhance the natural features. In this case, the fall in the land and the tree coverage.
- Have a well considered relationship between the ground floor and the ground plane.
- Integrate the interior and exterior of the building and design the buildings; planting; levels and open space into a cohesive whole.
- Use the appropriate plant species.

The Response

Retain and Reveal the Natural Features

The natural features on the site are limited. Two large trees are retained the Mona Vale Road frontage. 116 trees are proposed. Of this number 38 are capable of attaining 13 metres in height.

The landscaping treatment fills up the spaces between Buildings A and B and around the site. The communal space is on the far northwest corner. It is private although it is not clear how much overlooking there might be from the adjacent apartment buildings.

Selected trees will be removed because they are in the proposed location of the building footprint or are large predominately exotic trees that would be situated close to the proposed buildings and their root zone would be adversely affected.

The proposed landscaping is domestic in scale and organisation. All three buildings are “ringed” by a strip of planting and the proposed trees garden beds etc “fill” up the external spaces.



Planting has the potential to order the “left over” spaces but in this proposal it uses the same fragmented approach as the buildings. It does not structure the site.

Planting is proposed or will be retained to side boundaries to protect the amenity of adjacent residents. No planting is proposed for the roofs.

The underground car parking and the size of the building footprints will result in changes to the topography.

The relationship between the ground floor and the ground plane

The ground plane is relatively flat. The proposed development fails to integrate the buildings with the ground plane in other than the most arbitrary way. This is evident in:

- The lack of direct generous linkages from the street level into the buildings and around the site.
- The landscaping is ornamental rather than structural.
- The lack of either direct connections and / or a relationship from the site into the courtyards and private open spaces. The ground floor courtyards follow the line of the balconies above and replicate the convoluted plan. The buildings sit in the landscape rather than being integrated with it.
- The views within the space between Buildings A and B are terminated by walls and/ or features etc. adding to the lack of legibility of the site.
- The “up and over” solution to the pedestrian pathway at the Memorial Ave pedestrian entrance. This is an inappropriate solution for buildings which are in a landscaped setting. It may be acceptable in a highly dense urban environment.

The Relationship of Interior and Exterior Spaces

The proposed development does not integrate the external and internal spaces in a meaningful way.

The entrance lobbies in all 3 buildings had the potential to provide views through to the site beyond but this potential has not been realised. Every view is terminated by a wall.

The windows to the living areas appear to all be “hole in the wall” rather than opening up the internal spaces between the interior and exterior.

Plant Species

The proposed plant palette represents an appropriate selection for the site.

PRINCIPLE NO. 7: AMENITY

Good design provides amenity through the physical, spatial and environmental quality of a development.

The Requirement

To ensure that an apartment building has a high level of amenity it needs to:

- Provide clear safe visible places which create a sense of entry.
- Good vertical and horizontal circulation throughout the buildings.
- Have adequate useable communal open space.
- Have apartments which:



- are the right size for the number of occupants
- are well planned for circulation and furniture placement
- have a good relationship between the exterior and the interior
- have aural and visual privacy
- have a pleasant outlook
- have adequate useable private open space
- meet the requirements re solar access; cross ventilation etc [see Resource Energy and Water Efficiency].

The Response

The overall quality of the apartments is acceptable however some of the internal apartment planning is weak, the circulation around the site is poor as is the internal circulation within the buildings.

Entrances / Pedestrian Circulation

There are two pedestrian entrances from Mona Vale Road. The most southerly one provides access to Building A from an angled pathway which joins a curved pathway leading from the street. Access to Building B is around Building A and access to Building C is past Building A and around Building B.

The most northerly pedestrian access provides secondary access to Building C from a long path parallel to the Northern Boundary past Buildings A and B. There is also a conflict in the reading of this pedestrian access to Building C. The access way denoted as “secondary” is in fact the clearest and most direct route from the street.

There is a pedestrian entrance from Memorial Ave along the southern most access handle. This connects the pedestrian route that circumnavigates the buildings.

All the pedestrian access paths are convoluted and not direct.

- The pedestrian entrances to the apartment blocks from the street are not generous and not direct.
- The secondary entrance to building B is via a 45 degree angled pathway. It is tight and mean.
- Building C has its main entrance on the southern side of the building. This is accessed via the ramp system from Memorial Ave.

The current organisation of buildings could be designed to locate a direct access to Building A from the street and from Building A to Building B. Another entrance along the southern boundary of the site with the car park could provide direct access to Buildings A and B.

Vehicle Circulation

There are two car entrances from Mona Vale Road and two from Memorial Ave. The left in left out to Mona Vale Road are set at angles to the street and converge at the entrance to the underground car park. The entrances from Memorial Ave are the existing access handles which serve the battle axe allotments. The one on the south is an exit and pedestrian way. The one on the north serves as the entrance.

The basement car parking entrance and exit on Mona Vale Road are located at a low level point on the site and provides direct access into the basement garages. The entry from Mona Vale Road to the driveway and the garages will have some impact on the street because of the two driveways and their angle to the street but because of the level differences and the set-backs it is acceptable.



The entry and exit from Memorial Ave along the driveways will have little impact on the street because the two driveways are level and long and are currently used for that purpose. They are well separated along the street although when the intermediary sites are developed Memorial Ave will be impacted by a larger number of car movements. There will be a greater volume of traffic and this will impact on adjoining development.

There is an impact at the entrance to the site however at the end of the exit driveway. The driveway is sloped to exit the car park and because the access handle is narrow a very tight convoluted relationship is created with the pedestrian pathway. The pedestrian pathway is raised to go over the driveway and the underside of the pathway and planters stepped. This solution is poor.

Circulation within the Buildings

- Vertical circulation from the car park into the buildings is direct.
- Lobbies are not generous and do not provide a sense of arrival.
- The lifts are located off to one side in Buildings A and B.
- The corridors are offset in Building A creating yet an unnecessary lack of legibility.

Communal Open Space

There is a ground level communal space with a barbeque on the north-west. This is connected by paths which circumnavigate the site. The communal space has limited overlooking from Building C but its discrete location may enable it to be well used because it is not directly outside an apartment.

The Apartment Design

Size

The quality of the internal planning of the apartments varies.

The apartments have plans which contain sufficient floor space in terms of the number of bedrooms / number of residents however the poor internal planning has resulted in a lack of useable space internally.

Circulation

Apartment circulation varies in terms of its resolution. Many apartments will not easily be able to be appropriately furnished. Apartments which have poor internal circulation on all levels are:

- A 01
- A 03
- A 04
- A 07
- B 08
- C 03
- C 07

Interior / Exterior Relationships

Some apartments have plans which relate the interior living areas well to the external living but others have more contorted relationships and the lack of more responsive glazing fails to capitalise on the potential for a “garden” experience.



Aural and Visual Privacy

Some apartments have an outlook to the street and front garden to Mona Vale Road. It is however very noisy Treatment to the balconies on this frontage has incorporated acoustic screening. This is addressed in the Acoustic report.

The distances between apartment windows provide adequate visual privacy.

Outlook

Some apartments have an outlook to the street and/ or garden areas. The upper levels will have district views.

Many of the apartments have no street outlook because the site has such a long internal perimeter boundary and look directly into the boundary fence. It is therefore critical important that the fencing is treated as walling not as a timber paling and / or colour-bond fence.

Private Open Space

All upper level apartments have balconies of about 10-12 square metres. Where they are deeper than they are wide the interior of the rooms which they adjoin may struggle to have adequate light.

Most balconies are recessed or semi recessed thereby avoiding issues of overlooking. This design solution also assists in limiting the potential of noise transmission. Balconies for A05 and A 06 however are side by side and require a separating wall.

Some of the courtyards to the ground floor apartments would offer better amenity to the apartments if a greater area was included as courtyards - possibly split level, rather than as a strip of open space along the boundary. This provides an additional choice in terms of residents who want to have a more generous garden area. This approach would "ground" the buildings with the land in a more deliberate way rather than the tendency for the buildings to "float".

PRINCIPLE NO. 8: SAFETY AND SECURITY

Good design optimises safety and security, both internal to the development and for the public domain

The Response

The basic principles of CPTED are evident in the proposal but the shape of the site and the organisation of the buildings results in the entrances to Building B being overlooked by Building A and not the street. The entrance to Building C is only overlooked by the apartment block on the adjacent site.

The buildings are secure and have controlled access to basements and entrance doors. There is a clear delineation of public and private domain.

PRINCIPLE NO. 9: SOCIAL DIMENSIONS

Good design responds to the social context and needs of the local community in terms of lifestyles, affordability and access to social facilities.



The Response

The location of the precinct provides access to shops; services; bus routes and open space in a lovely part of Sydney.

The introduction of apartments and apartment buildings in this area provides the opportunity for people to buy at a more affordable level or to downsize from the larger houses and gardens in the surrounding suburbs. It also adds to the housing mix and enables people without cars or who can no longer drive to be able to live here with reasonable access to immediate facilities and other parts of Sydney.

The convoluted form of the development and the failure to organise the site so that it contributes to a coherent street and block pattern limits its ability to add to the social fabric of the area. New development should make a positive contribution. This proposal simply provides housing.

The development appears to be expensive to build, the extent of external wall; the huge differential of apartment designs, variations in kitchen layouts etc. Yet this is adding nothing to the quality of the outcome. Affordability is an issue that should be considered in the social context.

PRINCIPLE NO. 10: AESTHETICS

Quality aesthetics require the appropriate composition of building elements, texture, materials and colours and reflect the use, internal design and structure of the development.

The Requirement

Successful resolution of the aesthetics of a building addresses similar issues to scale and built form. All buildings need to be resolved in two ways.

Firstly, a building needs to be resolved at the larger scale as a balance between building form and the spatial system. This needs to reflect the context of the precinct / city. In this context it encompasses the shape; footprint; height of the building together with the spaces between and around the buildings.

Secondly, a building needs to be resolved in how the particular form is articulated. In the case of an apartment building it deals with the placement of openings; organisation of balconies; walls; use of materials; roof form etc.

To ensure that a development has a high level of aesthetics in relation to the level of massing and form it needs to:

- Relate the buildings to the site dimensions; shape and topography.
- Relate the building form to the other buildings on the site and those in the precinct so that they create a positive spatial system.

To ensure that a development has a high level of aesthetics at the detail level of proportioning it needs to:

- Ensure that the openings; projections and materials relate in proportion to the overall massing and arrangement of the form.
- Organise the openings; projections and materials into a cohesive whole.
- Use materials that relate to the building typology and the precinct.



The Response

The proposal is aesthetically poorly considered in terms of the overall form; its relationship to the site and as well as the detailed architectural resolution of the buildings. This is for the following reasons.

Massing and Form

The Relationship of the Buildings to the Site

The plans, sections and organisation of the buildings are not well related to the site for the following reasons:

- The buildings are organised to fill up the site not structure the site.
- Buildings B and C have no street address.
- The street and block pattern is too large for this density.
- The site circulation is convoluted and not well resolved.

The Relationship of the Building Form to other Buildings

- The building form will only enable a positive spatial relationship to be created with adjacent development the north of Buildings A and B and across Mona Vale Road.
- The building form does not create a positive spatial system within the site or enable one with potential neighbours.

Proportions: Modulation and Articulation; Fenestration and Materials

The building form is dominant and does not enable an appropriate resolution of the proportioning with meaningful modulation and articulation of the elements. The framing elements are arbitrary and the openings are not organised into a coherent whole relative to the overall proportions of the building.

The resolution of the fenestration on the upper levels should form a contiguous horizontal band between the floor level and the under-side of the skillion roof.

The selection of materials is satisfactory.

Conclusion

The proposed development for Village Building Company is for three residential flat buildings containing 124 apartments to be located at 5A-13 Memorial Ave and 212-216 Mona Vale Rd, St Ives. The density is appropriate for the location and reflects the aspirations of the zoning and DCP.

Designed by dem architects, the development is the result of a simplistic response to the controls rather than an understanding of the context.

The site is inappropriate for the residential flat typology because of the lack of street frontage and irregular shape combined with setbacks. The street and block pattern is too large for an apartment typology without the introduction of a finer grain street pattern.

The floor space is organised into three buildings that are located one behind the other. The building form and organisation of the buildings on the site is unsatisfactory. This is the result of convoluted floor plans; poor site circulation and a failure to set up a positive spatial system between the buildings on the site and with those around the site.



The height is appropriate and relates to the apartment blocks in the area and the other controls of density, set-backs and site coverage. The height does not have any adverse impacts on other development within or around the site.

Circulation is poor within the buildings and within many apartments.

The proposal lacks a strong idea about space and the organisation of the buildings on the ground. The site requires a comprehensive master-plan which deals with the street and block pattern and the organisation of buildings.

Ideally in urban design terms the project should be redesigned to address:

- The absence of street frontage to Buildings B and C.
- The size and shape of the street block.
- The design of the buildings as separate object buildings and not as a coherent whole with a positive spatial system within the site and with the potential to create a positive spatial system with the neighbouring buildings.
- The convoluted form of the buildings in plan and section.
- The external circulation.
- The poor internal planning of some units.
- The use of the landscaping as a structural element not just as an ornamental element.
- The integration of the courtyards / balconies at ground level where possible to create a variety of external conditions and not just a variety of internal conditions and to create a better relationship between the ground plane and the ground level.

Recommendations

The DA submission has been through a long process and most of the sites in the block have been developed. To improve the current proposal I recommend the following:

1) External Circulation

Rationalise the external circulation by creating a direct pathway system to access the buildings.

- Create a wide and direct path into building A from the street.
- Create wide and direct paths from the street along the southern and northern boundaries of the site.
- Provide direct routes off the northern and southern pathways to connect with buildings A B and C On the southern pathway this will require the reconfiguration to the end of Building B.
- Reconfigure the design at the intersection of the garage exit and the pedestrian pathway. Consider using a share-way for the exit or paths on either side. Use an access from the Northern pathway as the main pedestrian entrance to the Building C.

2) Built Form

Plan

Rationalise the plans into more regular plan form at ground.

- Building A Eastern façade – remove stepping in G-05 and relate to G -06 or similar if there is an alternative workable solution.
- Building B southern façade – remove G-08 to provide a clear edge aligning with Building A.



- Building C northern façade – redesign G-01 to align with building on adjacent site and building B or similar if there is an alternative workable solution.

During this process where possible rationalise the internal planning to be clear and direct both of the units or the internal circulation.

Level Five Fenestration

Remove the “hole in the wall” fenestration and organise the fenestration in glazing and panels to extend to the underside of the roof line on the upper levels of all buildings so that the tops of the buildings read as contiguous horizontal elements.

3) Landscape

Rationalise the planting to relate the above reconfigured pathways and built form so that the spaces are well defined and the pathways are clear direct.

4) Boundary Fencing

Design all boundary fencing as courtyard walling and not as a timber paling and / or colour-bond fence.